What is claimed is:

1. A catalyst for bulk polymerization of a polymerizable unsaturated compound, comprising a compound having at least one thiol group and a secondary hydroxyl group and represented by the following formula (I):

(I)

wherein R¹ to R⁵ are each independently a hydrogen atom or an alkyl group of 1 to 12 carbon atoms, and R⁶ is at least one group selected from a hydroxyl group, an alkoxy group of 1 to 12 carbon atoms and an alkyl group of 1 to 12 carbon atoms.

2. The catalyst for bulk polymerization as claimed in 5 claim 1, wherein the compound represented by the formula (I) is thioglycerol.